## CLAIMS

**1.** An apparatus comprising:

a first device;

a first connector coupled to the first device;

a second connector coupled to the first connector through a first plurality of conductors, wherein alternating pairs of conductors are reversed; and

a second device coupled to the second connector through a second plurality of conductors.

**2.** An apparatus as recited in claim 1 wherein the first device includes a plurality of differential drivers.

**3.** An apparatus as recited in claim 1 wherein the second device includes a plurality of differential receivers.

**4.** An apparatus as recited in claim 1 wherein the first device is an integrated circuit.

**5.** An apparatus as recited in claim 1 wherein the first device is an integrated circuit disposed on a substrate, wherein the substrate is electrically coupled to the integrated circuit and the first connector.

**6.** An apparatus as recited in claim 1 wherein the second device is an integrated circuit.

**7.** An apparatus as recited in claim 1 wherein the first device has an inductive coupling coefficient substantially the same as the inductive coupling coefficient of the second device.

**8.** An apparatus as recited in claim 1 wherein the alternating pairs of conductors are reversed once between the first connector and the second connector.

**9.** An apparatus as recited in claim 1 wherein alternating pairs of conductors in the second plurality of conductors are reversed.

**10.** An apparatus comprising:

a first integrated circuit including a plurality of differential drivers;

a first connector coupled to the first integrated circuit;

a second connector coupled to the first connector through a plurality of electrical conductors, wherein alternating pairs of the electrical conductors are reversed; and

a second integrated circuit coupled to the second connector, wherein the second integrated circuit includes a plurality of differential receivers.

**11.** An apparatus as recited in claim 10 further comprising a second plurality of electrical conductors coupled between the second connector and the second integrated circuit, wherein alternating pairs of the second plurality of electrical conductors are reversed.

**12.** An apparatus as recited in claim 10 further comprising a second plurality of electrical conductors coupled between the second connector and the second integrated circuit, wherein each pair of conductors includes an inverted conductor and a non-inverted conductor, each inverted conductor coupled to a non-inverted input of one of the differential receivers, and each non-inverted conductor coupled to an inverted input of one of the differential receivers.

**13.** An apparatus as recited in claim 10 wherein the first integrated circuit has an inductive coupling coefficient substantially the same as the inductive coupling coefficient of the second integrated circuit.

**14.** An apparatus as recited in claim 10 wherein the alternating pairs of electrical conductors are reversed once between the first connector and the second connector.

**15.** An apparatus comprising:

a printed circuit board;

a plurality of connectors disposed on the printed circuit board;

a first integrated circuit disposed on a first substrate, wherein the first substrate is configured to be coupled to one of the plurality of connectors;

a second integrated circuit disposed on a second substrate, wherein the second substrate is configured to be coupled to one of the plurality of connectors; and

a first plurality of electrical conductors coupled to the plurality of connectors, wherein alternating pairs of conductors between adjacent connectors have reversed polarity.

**16.** An apparatus as recited in claim 15 wherein the printed circuit board is a backplane.

**17.** An apparatus as recited in claim 15 further comprising a second plurality of conductors coupled between the first integrated circuit and one of the plurality of connectors, wherein alternating pairs of conductors have reversed polarity.

**18.** An apparatus as recited in claim 15 wherein the first substrate is a printed circuit board.

**19.** An apparatus as recited in claim 15 wherein the first substrate is a memory module.

**20.** An apparatus as recited in claim 15 wherein the first integrated circuit is a memory device.

**21.** An apparatus as recited in claim 15 wherein the first integrated circuit has an inductive coupling substantially the same as the inductive coupling of the second integrated circuit.

**22.** An apparatus comprising:

a first device; and

a second device coupled to the first device through a plurality of electrical conductors, wherein the inductive coupling coefficient of the first device is adjusted to be substantially the same as the inductive coupling coefficient of the second device.

**23.** An apparatus as recited in claim 22 wherein the first device includes a plurality of differential drivers, wherein each differential driver is coupled to a pair of electrical conductors.

**24.** An apparatus as recited in claim 22 wherein the second device includes a plurality of differential receivers, wherein each differential receiver is coupled to a pair of electrical conductors.

**25.** An apparatus as recited in claim 22 further comprising a pair of connectors coupled between the first device and the second device, wherein a second plurality of electrical conductors are coupled between the pair of connectors, and wherein alternating pairs of electrical conductors are reversed.

**26.** A method comprising:

generating a plurality of differential signals;

transmitting the plurality of differential signals through a first connector and a second connector to a plurality of differential receivers;

reversing the polarity of alternating differential signals between the first and second connectors; and

reversing the polarity of alternating differential signals between the second connector and the plurality of differential receivers.

**27.** A method as recited in claim 26 wherein the first connector generated inductive coupling noise as the differential signals are transmitted through the first connector.

**28.** A method as recited in claim 26 wherein the second connector generated inductive coupling noise opposite the noise generated by the first connector as the differential signals are transmitted through the second connector.

**29.** A method as recited in claim 26 further including decoding the plurality of differential signals.

**30.** A method as recited in claim 26 wherein a transmitter package transmits the plurality of differential signals and a receiver package receives the plurality of differential signals.

**31.** A method as recited in claim 30 further including modifying the transmitter package such that the coupling coefficient of the transmitter package is substantially the same as the receiver package.

**32.** A method comprising:

modifying a transmitter package such that the coupling coefficient of the transmitter package is substantially the same as the coupling coefficient of a receiver package;

transmitting multiple pairs of differential signals using the transmitter package; and

receiving the multiple pairs of differential signals using the receiver package.

**33.** A method as recited in claim 32 wherein the transmitter package transmits multiple pairs of differential signals across a plurality of conductors.

**34.** A method as recited in claim 32 further comprising decoding the multiple pairs of differential signals.

**35.** A method as recited in claim 32 wherein the differential signals are transmitted through a pair of connectors on a plurality of conductors, wherein alternating pairs of conductors are reversed between the pair of connectors.